Case 3134

Rana cryptotis Boulenger, 1907 (currently Tomopterna cryptotis; Amphibia, Anura): proposed precedence of the specific name over that of Chiromantis kachowskii Nikolsky, 1900

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Abstract. The purpose of this application is to conserve the specific name of *Tomopterna cryptotis* (Boulenger, 1907) for a very common and widespread species of burrowing or sand frog (family RANIDAE) from much of sub-Saharan Africa. It is proposed that the name be given conditional precedence over the little used *Chiromantis kachowskii* Nikolsky, 1900.

Keywords. Nomenclature; taxonomy; Amphibia; Anura; RANIDAE; burrowing frogs; sand frogs; Africa; *Chiromantis kachowskii*; *Tomopterna cryptotis*.

- 1. Nikolsky (1900, p. 246) described *Chiromantis kachowskii* (by implication a species in the family RHACOPHORIDAE) based upon two specimens obtained on 21 July 1898 at Ferad in Abyssinia (now Ethiopia, at approximately 10° 49′ N, 42° 42′ E). These had been donated by the collector, G.V. Kakhovsky, to the Zoological Museum (now the Zoological Institute of the Russian Academy of Sciences) in St Petersburg and given the accession number 2077.
- 2. We have recently examined specimens labelled ZISP 2077.1–2 and found them to be representatives of a taxon that, for at least the past 20 years, has been called *Tomopterna cryptotis* (family RANIDAE), a species erected by Boulenger (1907, p. 109) for material collected in Angola and originally named *Rana cryptotis*. Syntypes of this species are in the amphibian collections of the Natural History Museum, London.
- 3. Nikolsky's (1900) account of *Chiromantis kachowskii* includes phrases that accurately describe the coloration and 'tuberculo metatarsali interno magno, scaphoideo' of his supposed syntypes, especially ZISP 2077.1, along with observations that are clearly at variance with other features exhibited by this material. In particular, both specimens lack 'digitis plantarum longis, fere per totam longitudinem palmatis, discis terminalibus digitorum minimis, vel indistinctis'. Do these discrepancies indicate that the specimens now labelled ZISP 2077 are not those which carried this number at the time when Nikolsky described the type material of *Chiromantis kachowskii*? After finding no evidence in either the St Petersburg archives or

collections that any such translocation of data might have occurred in the past and that the only examples of *Chiromantis* to be found in this museum are catalogued as having been collected in 1930, we conclude that we have indeed examined the syntypes of *C. kachowskii* and that Nikolsky's description of this species is less accurate than might have been expected.

- 4. Since the time of its first publication, no specimens other than the types have ever been assigned the name *Chiromantis kachowskii*. References in the literature merely acknowledge the existence of this nominal taxon, or repeat information derived from Nikolsky (1900) by authors who undoubtedly never personally examined the material in St Petersburg (see Werner, 1923, pp. 63–64; Noble, 1924, pp. 228, 320; Ahl, 1929, pp. 27–28 and 1931, p. 39). Loveridge (1957, p. 315) chose to treat *C. kachowskii* as a junior synonym of *C. petersii kelleri* Boettger, 1893, a rather casual and clearly unsatisfactory allocation that was nevertheless repeated by Gorham (1974, p. 156) and has remained unchallenged until the present time.
- 5. In marked contrast, Tomopterna cryptotis is currently believed to be a very common and widespread species, ranging from Angola, Namibia and South Africa northwards to Eritrea and from there westwards to Senegal. Formerly often confused with Pyxicephalus delalandii Tschudi, 1838, the name cryptotis was used to denote a distinct subspecies by Poynton (1964, p. 96), who observed differences in the calls of males from two allopatric populations in South Africa. The combination Tomopterna cryptotis was subsequently employed by Clarke (1981, pp. 313, 318), who considered this genus to be only distantly related to other African ranines, and by Frost (1985, p. 523). Still more recently, Dubois (1992, p. 336) and Duellman (1993, pp. 283-284) have treated Tomopterna Duméril & Bibron, 1841 as the single genus within the subfamily TOMOPTERNINAE Dubois, 1987. Some representative faunal studies that have adopted the name Tomopterna cryptotis include Lanza (1981, p. 168 and 1990, p. 411): Somalia; Poynton & Broadley (1985, pp. 125-126): Botswana, Zambia, Malawi, Mozambique and Zimbabwe; Passmore & Carruthers (1995, p. 294): South Africa; Rödel (1996, pp. 70-72): Senegal, Nigeria and Niger; and Largen (1997, p. 74): Eritrea.
- 6. There appears to be a strong prima facie case for the suppression of the specific name of *Chiromantis kachowskii* Nikolsky in order to maintain nomenclatural stability and avoid widespread confusion, but the need for caution is also evident. *Tomopterna krugerensis* Passmore & Carruthers, 1975 was described from a South African population morphologically very similar to *T. cryptotis* and only known to differ consistently in call structure. It would be wise to allow that acoustic and cytochemical studies might one day show that north-east African populations of *Tomopterna* are also discrete, particularly since separated by some 4000 km from the type locality of *T. cryptotis*. In this event, the name *T. kachowskii* (Nikolsky) would almost certainly be applicable. We therefore propose that the name *T. cryptotis* be given only conditional precedence over *Chiromantis kachowskii*, in accordance with Article 81.2.3 of the Code.
- 7. Commission approval of the proposal above will mean that, if the specific names of *T. cryptotis* and *C. kachowskii* are considered to be synonyms, *cryptotis* becomes the valid specific name for the taxon. The name *kachowskii* will remain available for use if taxonomically required for a species or subspecies distinct from *cryptotis*.

- 8. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary power to give the name *cryptotis* Boulenger, 1907, as published in the binomen *Rana cryptotis*, precedence over the name *kachowskii* Nikolsky, 1900, as published in the binomen *Chiromantis kachowskii*, whenever the two are considered to be synonyms;
 - (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *cryptotis* Boulenger, 1907, as published in the binomen *Rana cryptotis*, with the endorsement that it is to be given precedence over the name *kachowskii* Nikolsky, 1900, as published in the binomen *Chiromantis kachowskii*, whenever the two are considered to be synonyms;
 - (b) kachowskii Nikolsky, 1900, as published in the binomen *Chiromantis kachowskii*, with the endorsement that it is not to be given priority over *cryptotis* Boulenger, 1907, as published in the binomen *Rana cryptotis*, whenever the two are considered to be synonyms.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, 1.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).